

**NORTHROP GRUMMAN**

DEC 27 2005

Interconnect Technologies Division  
Litton Systems, Inc.  
4811 W. Kearney  
Springfield, MO 65803

December 19, 2005

Mr. Trevor Urban  
Environmental Scientist/RCRA Inspector  
U.S. Environmental Protection Agency, Region VII  
901 North 5<sup>th</sup> Street  
Kansas City, Kansas 66101

RE: Corrective Actions for Notice of Violation Issued December 7, 2005

Dear Mr. Urban,

Pursuant to the Notice of Violation (NOV) that was issued at the completion of your RCRA inspection on December 6<sup>th</sup> and 7<sup>th</sup>, 2005, Litton Systems, Inc. Interconnect Technologies Division (Litton-ITD), which is a wholly owned subsidiary of Northrop Grumman Systems Corporation, is providing the following response. Litton-ITD has corrected all of the violations noted in the NOV. Supporting documentation of the corrective actions taken is attached to this letter.

#	Citation	Description of Violation	Corrective Action(s)
1	10 CSR 25-5.262(1) per 40 CFR 265.171	Failure to keep satellite accumulation container closed. (PISM area)	A daycan (which closes automatically) was put in the PISM area. Operators in that area have been re-trained to ensure that the daycan remains closed, except when contents are added or removed. See Attachment #1 for a picture of the container.
2	10 CSR 25-5.262(1) per 40 CFR 262.34(c)(1)(ii)	Failure to mark/identify contents of satellite accumulation container and put start date on container. (PISM and Environmental Lab)	The two containers of waste nitric acid solution in the Environmental Lab and the daycan in the PISM area have been marked and dated. Refresher training on applicable container labeling requirements has been provided to operators in their respective areas. See Attachments #2A and #2B for pictures of the three containers.

453031



RCRA RECORDS

#	Citation	Description of Violation	Corrective Action(s)
3	10 CSR 25-5.262(1) per 40 CFR 262.34(c)(1)&(2)	Failure to move satellite container to storage and place satellite container at/near point of generation (i.e. waste paint).	The container of waste paint was moved to the 90-day storage area. Operators have also been instructed to perform all future paint consolidation within the 90-day storage area. See Attachment #3 for a picture of the container in the 90-day storage area.
4	10 CSR 25-5.262(2)(B)(1)&(2)	Failure to provide license plate number and specific gravity on manifests.	The license plate number and specific gravity appears to be missing only from those manifests prepared by Safety Kleen. Safety Kleen was contacted and has agreed to place such information on all future manifests. Further, Safety Kleen amended the manifest template to include specific gravity and the license plate number. In addition, Litton-ITD has created a manifest checklist to be used to review the manifest prior to shipment of waste. See Attachment #4 for a copy of the revised manifest and the manifest checklist.
5	10 CSR 25-5.262(1) per 40 CFR 265.16(d)(1),(2),&(3)	Failure to have written job descriptions for employees performing hazardous waste management to include duties performed and initial and continual training.	The RCRA Hazardous Waste Management Program has been amended to include written job descriptions and training information. See Attachment #5 for a revised copy of the program.

If you have any questions, or need more information, please call me at (417) 829-5350.

Sincerely,



Jami Norton Gay  
Environmental Engineer

cc: Jill Palmer – Northrop Grumman  
Jay Tolle – Northrop Grumman



#1



# HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL  
IF FOUND CONTACT THE NEAREST POLICE OR  
PUBLIC SAFETY AGENCY OR THE  
U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE IDENTIFICATION  
NAME: LITTON INDUSTRIES TECHNICAL, INC.  
ADDRESS: 1001 S. BROADWAY  
ST. LOUIS, MO. 63102  
DATE: 12-19-95  
HANDLE WITH CARE!  
CONTAINS HAZARDOUS OR TOXIC WASTES

FLAMMABLE  
RAG  
WASTE DRY CAN



#2A





#23



NOTICE  
Dispose of waste frequently  
when using organic solvents  
DO NOT allow drain vessel  
to become full

**HAZARIDOUS WASTE**

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL  
IF FOUND, CONTACT THE NEAREST POLICE OR  
PUBLIC SAFETY AUTHORITY OR THE  
U.S. ENVIRONMENTAL PROTECTION AGENCY

PROPER D.O.T.  
CLASSIFICATION: UN 3077

GENERATOR INFORMATION  
NAME: John Doe  
ADDRESS: 123 Main St  
CITY: Anytown  
STATE: CA  
ZIP: 90210

HAZARDOUS WASTE INFORMATION  
EPA ID: 123456789  
WASTE NO.: 001  
MANIFEST NO.: 123456789  
ACCUMULATION START DATE: 1/1/00

**HANDLE WITH CARE!**  
CONTAINS HAZARDOUS OR TOXIC WASTES



#3





## Hazardous Waste Manifest Checklist – Missouri Facilities

<b>Facility Name</b>	
<b>EPA ID Number</b>	
<b>State Manifest #</b>	
<b>Name of Person Completing Checklist</b>	
<b>Date</b>	

✓	Item <sup>1</sup>
<input type="checkbox"/>	<b><i>Is the manifest an approved manifest? (OMB control number 2050-0039; EPA Form 8700-22)</i></b> <ul style="list-style-type: none"> <li>If the state to which the shipment is manifested (consignment state) supplies the manifest and requires its use, then the generator shall use that state's manifest.</li> <li>If the consignment state does not supply the manifest then the generator must use a State of Missouri manifest.</li> </ul>
<input type="checkbox"/>	<b><i>1. Generator's US EPA ID number - Manifest Document Number</i></b> <ul style="list-style-type: none"> <li>Verify that the correct 12-digit US EPA ID number is entered for the facility.</li> <li>Verify that the manifest document number (5-digit number unique to the manifest) is entered on all pages of the manifest and is sequential to previous manifests.</li> </ul>
<input type="checkbox"/>	<b><i>2. Number of Pages</i></b> <ul style="list-style-type: none"> <li>Verify that the correct number of pages is entered.</li> </ul>
<input type="checkbox"/>	<b><i>3. Generator's Name and Mailing Address</i></b> <ul style="list-style-type: none"> <li>Verify that the facility name and mailing address for the contact person that will maintain the manifest files at the generator facility is entered.</li> </ul>
<input type="checkbox"/>	<b><i>4. Generator's Phone Number</i></b> <ul style="list-style-type: none"> <li>Verify that the phone number for the contact person at the generator facility is entered.</li> </ul>
<input type="checkbox"/>	<b><i>5. Transporter 1 (Company Name)</i></b> <ul style="list-style-type: none"> <li>Verify that the company name of the first transporter who will transport the waste is entered.</li> </ul>
<input type="checkbox"/>	<b><i>6. Transporter 1 - US EPA ID Number</i></b> <ul style="list-style-type: none"> <li>Verify that the correct 12-digit US EPA ID number of the transporter is entered.</li> </ul>
<input type="checkbox"/>	<b><i>7. Transporter 2 (Company Name, if applicable)</i></b> <ul style="list-style-type: none"> <li>Not applicable at time of initial shipment, unless known in advance.</li> </ul>
<input type="checkbox"/>	<b><i>8. Transporter 2 - US EPA ID Number, if applicable</i></b> <ul style="list-style-type: none"> <li>Not applicable at time of initial shipment, unless known in advance.</li> </ul>

1. \_\_\_\_\_

<sup>1</sup> Item number or letter, if provided, correlates to the Uniform Hazardous Waste Manifest.



✓	Item <sup>1</sup>
<input type="checkbox"/>	<b>9. Designated Facility Name and Site Address</b> <ul style="list-style-type: none"> <li>Verify that the name and site address of the designated facility is entered.</li> <li>Verify that the designated facility is on the Northrop Grumman ES Approved Treatment, Storage, &amp; Disposal Facility (TSDF) list.</li> </ul>
<input type="checkbox"/>	<b>10. Designated Facility - US EPA ID Number</b> <ul style="list-style-type: none"> <li>Verify that the correct US EPA ID number of the designated facility is entered.</li> </ul>
<input type="checkbox"/>	<b>A. State Manifest Document Number</b> <ul style="list-style-type: none"> <li>Verify that the site's six digit Missouri Generator I.D. number is entered.</li> <li>Verify that the shipment number (4-digit number unique to the manifest) is entered and is sequential to previous manifests. (This number should correspond to the Manifest Document No. entered in section 1.)</li> </ul>
<input type="checkbox"/>	<b>B. State Generator's ID Number</b> <ul style="list-style-type: none"> <li>Verify that the generator's physical site address is entered here. If the mailing address and the site address are the same enter the word "SAME".</li> </ul>
<input type="checkbox"/>	<b>C. Transporter 1 - State Transporter's ID</b> <b>NOTE:</b> For non-Missouri manifests the information required below must be entered in section 15. <b>Special Handling and Additional Information.</b> <ul style="list-style-type: none"> <li>Verify that the license number assigned to the transportation firm is entered.</li> <li>Verify that the license plate number and the state of registration for the waste-carrying portion of the vehicle used to transport the waste is entered.</li> <li>Verify that the driver has a driver's license with a hazardous materials endorsement.</li> </ul>
<input type="checkbox"/>	<b>D. Transporter 1 Phone</b> <ul style="list-style-type: none"> <li>Verify that the telephone number where an authorized agent of the transporter may be reached is entered.</li> </ul>
<input type="checkbox"/>	<b>E. Transporter 2 - State Transporter's ID</b> <ul style="list-style-type: none"> <li>Not applicable at time of initial shipment, unless known in advance.</li> </ul>
<input type="checkbox"/>	<b>F. Transporter 2 Phone</b> <ul style="list-style-type: none"> <li>Not applicable at time of initial shipment, unless known in advance.</li> </ul>
<input type="checkbox"/>	<b>G. State Facility's ID, if applicable</b> <ul style="list-style-type: none"> <li>Verify that the correct State of Missouri six digit identification code is entered for shipments to a Missouri TSDF. If none has been assigned, leave blank.</li> </ul>
<input type="checkbox"/>	<b>H. Facility's Phone</b> <ul style="list-style-type: none"> <li>Verify that the telephone number where an authorized agent of the Designated Facility (TSDF) may be reached.</li> </ul>



✓	<b>Item<sup>1</sup></b>
<input type="checkbox"/>	<b>11. US DOT Description</b> <ul style="list-style-type: none"> <li>Must include for each line item: <ul style="list-style-type: none"> <li><input type="checkbox"/> U.S. DOT Proper Shipping Name (include the word "Waste" for all hazardous wastes and, if applicable, the letters "RQ" in the shipping name).</li> </ul> </li> </ul> <p><b>NOTE:</b> N.O.S. descriptions must include the two (2) most predominant constituents that contribute to the hazard of the mixture or solution, in parentheses after the description. Not required for lab-pack shipments.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Hazard Class or Division Number</li> <li><input type="checkbox"/> ID Number (UN/NA)</li> <li><input type="checkbox"/> Packing Group</li> </ul>
<input type="checkbox"/>	<b>12. Containers (No. and Type)</b> <ul style="list-style-type: none"> <li>Verify that the number of containers for each waste and the proper abbreviation for the type of container are entered. See back of manifest for a list of container abbreviations.</li> </ul> <p><b>NOTE:</b> Only the container abbreviations identified are permitted to be used.</p>
<input type="checkbox"/>	<b>13. Total Quantity</b> <ul style="list-style-type: none"> <li>Verify that the total quantity of the waste described on each line is entered.</li> </ul>
<input type="checkbox"/>	<b>14. Unit (Wt./Volume)</b> <ul style="list-style-type: none"> <li>Verify that the appropriate abbreviation used for the unit of measure is entered. See back of manifest for a list of unit of measure abbreviations.</li> </ul> <p><b>NOTE:</b> Only the unit of measure abbreviations identified are permitted to be used.</p>
<input type="checkbox"/>	<b>I. Waste No.</b> <ul style="list-style-type: none"> <li>Verify that the EPA hazardous waste code number(s) are entered. If no waste code is available, confirm that "NONE" is entered.</li> <li>If applicable, verify that either the Destination or the Generator State waste code(s) are entered. If there is both a Destination and Generator State waste code, then enter the Destination State waste code under Item I and the Generator State waste code under Item J. If no state waste code exists, confirm that "None" is entered.</li> </ul> <p><b>NOTE:</b> Additional waste codes must be entered in section <b>J. Additional Descriptions for Materials Listed Above</b>.</p> <p>This includes the special Missouri waste codes for polychlorinated biphenyls, dioxin wastes and certain used oils.</p>
<input type="checkbox"/>	<b>J. Additional Descriptions for Materials Listed Above</b> <ul style="list-style-type: none"> <li>Verify that the specific gravity is provided for those wastes listed in gallons, liters or cubic yards. (Specific gravity may also be provided in section 15.)</li> </ul> <p><b>NOTE:</b> This section may also be used to additional waste codes and additional information required by other states. (Ex: Trailer License #)</p>



✓	Item <sup>1</sup>
<input type="checkbox"/>	<b>K. Handling Codes</b> <ul style="list-style-type: none"> <li>• Verify that this section is left blank.</li> </ul>
<input type="checkbox"/>	<b>15. Special Handling Instructions and Additional Information</b> <ul style="list-style-type: none"> <li>• Verify that a 24-hour emergency phone number is entered.</li> <li>• Verify that the ERG number is entered in this section.</li> </ul> <p><b>NOTE:</b> This section may also be used to indicate special transportation, treatment, storage, or disposal information.</p>
<input type="checkbox"/>	<b>16. Generator's Certification</b> <ul style="list-style-type: none"> <li>• Verify that the generator has printed/typed their name, signed, and dated the manifest.</li> </ul>
<input type="checkbox"/>	<b>17. Transporter 1 (Acknowledgement of Receipt of Materials)</b> <ul style="list-style-type: none"> <li>• Verify that the Transporter 1 driver has printed/typed their name, signed, and dated the manifest.</li> </ul>







# ***NORTHROP GRUMMAN***

**DEFINING THE FUTURE**

## **RCRA Hazardous Waste Training Program**

### **Objective**

This RCRA Hazardous Waste Training Program describes all of the elements of the personnel training program for hazardous waste management at Interconnect Technologies Division of Litton Systems, Inc. (Litton-ITD) in Springfield, Missouri. The objective of the RCRA Hazardous Waste Training Program is to train employees on the proper methods of hazardous waste handling, to familiarize employees with the regulations, and to answer questions with employees who affect hazardous waste compliance. This training session also includes familiarity with the Contingency Plan, the SPCC Plan, and the Site Security Plan.

### **Training Description**

Employees in the Environmental Control, Plating Maintenance, and Facility Maintenance Departments as well as Wet Lab Technicians and Emergency Coordinators (as indicated in RCRA Contingency Plan) receive annual onsite RCRA training from the Environmental Engineer. The onsite RCRA training covers the types of hazardous wastes generated onsite and gives specific requirements for packaging, labeling, storage, and moving waste in the facility. Procedures to maintain compliance are included in this training. A short test is administered at the conclusion of training, and filed in the Environmental Engineer's office.

Training is done within 6 months of assuming one of the positions described above. Prior to training, these employees will not work unsupervised. This training is performed annually.

Jami Gay, the Environmental Engineer for the site, receives off-site training on an annual basis. This off-site training covers hazardous waste identification, waste accumulation and storage requirements, release response and reporting standards, manifesting, and Land Disposal Restriction requirements.



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## **DEFINING THE FUTURE**

### Job Titles and Job Descriptions

Duties of personnel who are required to receive annual hazardous waste training are detailed below. Attachment #1 contains a table which identifies those individuals who need annual RCRA training and their associated job titles and departments. Attachment #2 contains job descriptions from Human Resources for those personnel who need annual RCRA training.

The Environmental Control Department (ECD) is responsible for wastewater treatment (WWT), moving wastes from areas to waste storage, packaging and labeling wastes, managing wastes within the less than 90 day storage area, and constructing needed project materials, if needed. WWT duties include sampling/monitoring/adjusting chemistries and maintaining compliance with the site's WWT permit. ECD has one or more employee(s) onsite 24 hours/day, 7 days/week, and 365 days/year.

Plating Maintenance is responsible for chemical bath maintenance, replacing solutions, performing appropriate preventative maintenance, handling spent baths prior to proper wastewater treatment by the ECD.

Facility Maintenance is responsible for maintenance of facility equipment thru practices of preventative maintenance, monitoring, adjustment and special projects.

The Wet Lab Technicians empty the hazardous waste containers located under the atomic absorption units into an adjacent lift station that leads to WWT. These technicians are responsible for ensuring proper labeling of the hazardous waste containers.

The Environmental Engineer for the site coordinates all waste activities, inspects satellite and waste storage areas, oversees off-site waste shipments, and conducts environmental training for all onsite personnel.

The Emergency Coordinators are responsible for overseeing emergency response activities in the case of a spill, fire, release, or other incident involving hazardous materials.



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## **Attachment #1**

### **Employees Subject to Annual RCRA Training Requirements**

Name	Job Title	Department
Jami Gay	Environmental Engineer and Emergency Coordinator	Environmental & Safety
Brian Thompson	Emergency Coordinator	Environmental & Safety
Audi Luna	Emergency Coordinator	Manufacturing Engineering
Ramona Andrews	Sr. Wet Lab Technicians	Quality
Bonnie Jennings	Sr. Wet Lab Technicians	Quality
Auston Rushing	Lead Environmental Technician	Environmental Control
Tom Lyles	Senior Environmental Technician	Environmental Control
Jerry Diehl	Environmental Technician	Environmental Control
Rick Petit	Senior Environmental Technician	Environmental Control
Tony Nida	Environmental Technician	Environmental Control
Brent Breshears	Senior Plating Maintenance Tech	Plating Maintenance
Eric Dunn	Senior Plating Maintenance Tech	Plating Maintenance
Gary Lewis	Senior Plating Maintenance Tech	Plating Maintenance
Jay Robinson	Lead Maintenance Mechanic	Facility Maintenance
Bruce Pruitt	Maintenance Mechanic III	Facility Maintenance



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Attachment #2

Employee Job Descriptions from Human Resources

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## **INTERCONNECT TECHNOLOGIES JOB DESCRIPTION**

Date:	October 21, 2004	FLSA:	Non-Exempt	Grade:	H06
Job Title:	Plating Maintenance Worker	Department:	Quality Control – Labs		
Reports To (title):	Lead or Lab & Chem Maintenance Manager				
Summary of Duties and Responsibilities:					
Acts independently to add chemicals to manufacturing mixtures. Under general supervision, replaces chemical baths/solutions and cleans lines. Performs basic preventative maintenance as needed.					
Essential Duties and Responsibilities:					% Time
Reviews assigned preventative maintenance tasks and reviews computerized notices of additional chemicals to be added to manufacturing solutions/baths. Prints computerized notices for details on chemicals to be added, and gathers needed protective gear (gloves, face shield, etc.).					20
Measures or pumps out needed amounts of chemicals from storage containers following detailed instructions. Places measured amounts in marked containers or in beakers. Transports chemicals using carts, dollies, pallet jacks, or fork truck.					40
Adds required chemicals to lines. Assists with pumping out, cleaning lines, and replacing chemicals when required. Notifies environmental technicians of estimated discard volume prior to pumping/cleaning operations.					20
Performs basic preventative maintenance on lines (i.e., changing filters).					10
Completes post-maintenance hard copy forms to document work performed, downtime, completion dates, etc. following department procedures. Updates computer files to document chemicals added.					2
Maintains cleanliness of work areas and storage room.					2
Learns current work instructions and chemical hazards and prevention. Attends internal specialty training.					4

<b>Non-Essential Duties and Responsibilities:</b>	<b>% Time</b>
Participates in special projects as required.	2
Total Essential and Non-Essential:	100%



# ***NORTHROP GRUMMAN***

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## **INTERCONNECT TECHNOLOGIES JOB DESCRIPTION**

<b>Date:</b>	October 21, 2004	<b>FLSA:</b>	Non-Exempt	<b>Grade:</b>	H07
<b>Job Title:</b>	Plating Maintenance Technician	<b>Department:</b>	Quality Control – Labs		
<b>Reports To (title):</b>	Lead or Lab and Chem Maintenance Manager				
<b>Summary of Duties and Responsibilities:</b>					
Acts independently to add chemicals to mixtures or replace chemical baths/solutions. Cleans lines and performs preventative maintenance as needed.					
<b>Essential Duties and Responsibilities:</b>					<b>% Time</b>
Reviews assigned preventative maintenance tasks and reviews computerized notices of additional chemicals to be added to manufacturing solutions/baths. Prints computerized notices for details on chemicals to be added, and gathers needed protective gear (gloves, face shield, etc.).					20
Measures or pumps out needed amounts of chemicals from storage containers following detailed instructions. Places measured amounts in marked containers or in beakers. Transports chemicals using carts, dollies, pallet jacks, or fork truck.					30
Adds required chemicals to lines. Pumps out, cleans lines, and replaces chemicals when required. Notifies environmental technicians of estimated discard volume prior to pumping/cleaning operations. Notifies maintenance repair personnel of needed repairs.					20
Performs preventative maintenance on lines (i.e., changing filters).					10
Completes post-maintenance hard copy forms to document work performed, downtime, completion dates, etc. following department procedures. Updates computer files to document chemicals added.					10
Maintains cleanliness of work areas and storage room.					2
Maintains knowledge of current work instructions and chemical hazards and prevention. Attends internal specialty training.					2
May assist less experienced personnel.					4
<b>Non-Essential Duties and Responsibilities:</b>					<b>% Time</b>
Participates in special projects as required.					2
Total Essential and Non-Essential:					100%

# NORTHROP GRUMMAN

DEFINING THE FUTURE

## INTERCONNECT TECHNOLOGIES JOB DESCRIPTION

Date:	October 21, 2004	FLSA:	Non-Exempt	Grade:	H08
Job Title:	Senior Plating Maintenance Technician	Department:	Quality Control – Labs		
Reports To (title):	Lab & Chemical Maintenance Manager				
Summary of Duties and Responsibilities:					
Acts independently to add chemicals to mixtures, replace chemical baths/solutions, and change out and treat solder baths. Cleans lines and performs preventative maintenance as needed. Assists/trains less experienced personnel. May act as working group lead.					
Essential Duties and Responsibilities:					% Time
Reviews assigned preventative maintenance tasks and reviews computerized notices of additional chemicals to be added to manufacturing solutions/baths. Prints computerized notices for details on chemicals to be added, and gathers needed protective gear (gloves, face shield, etc.).					10
Measures or pumps out needed amounts of chemicals from storage containers following detailed instructions. Places measured amounts in marked containers or in beakers. Transports chemicals using carts, dollies, pallet jacks, or fork truck.					20
Adds required chemicals to lines. Pumps out, cleans lines, and replaces chemicals when required. Notifies environmental technicians of estimated discard volume prior to pumping/cleaning operations. Notifies maintenance repair personnel of needed repairs.					20
Processes solder and copper baths by cleaning out lines, treating the solution following instructions, and pumping back into manufacturing baths.					11
Performs preventative maintenance on lines (i.e., changing filters). Handles the more complicated maintenance items.					10
Completes post-maintenance hard copy forms to document work performed, downtime, completion dates, etc. following department procedures. Updates computer files to document chemicals added.					10
Maintains cleanliness of work areas and storage room.					8
Maintains knowledge of current work instructions and chemical hazards and prevention. Attends internal specialty training.					4
Assists/trains less experienced personnel.					4
May act as Working Group Lead, which includes assigning people to tasks, monitoring work group production, reporting on performance and problems, and ordering supplies.					1
Non-Essential Duties and Responsibilities:					% Time
Participates in special projects as required.					2
Total Essential and Non-Essential:					100%



# NORTHROP GRUMMAN

DEFINING THE FUTURE

## INTERCONNECT TECHNOLOGIES JOB DESCRIPTION

Date:	January 21, 2004	FLSA:	Hourly	Grade:	9
Job Title:	Lead Maintenance Mechanic	Department:	Manufacturing or Facilities		
Reports To (title):	Manager				
Summary of Duties and Responsibilities:					
Provides leadership and daily work direction to maintenance personnel. Works independently to perform repairs and preventative maintenance on mechanical, electrical, electro-mechanical equipment; hydraulics; plumbing; pumps; controllers; conveyers; motors, etc. Repairs/services according to layout plans, blueprints, drawings or work instructions. Responsible for troubleshooting repair requests, including handling complex problems. Monitors and maintains department paperwork. Develops work procedures.					
Essential Duties and Responsibilities:					% Time
Reviews maintenance requirements and prioritizes daily preventative maintenance requests. Determines personal workload and assembles tools. Meets with production supervisors to balance priorities with equipment not in use.					5
Performs preventative maintenance on a wide variety of industrial machinery and equipment using hand tools, automated tools, probes, meters, torches, etc.					10
Receives down-equipment and facility service requests via calls or work orders and assigns work. Responds to requests to repair equipment or facility problems. Assesses or diagnoses problems, dismantles machinery or facility equipment, and repairs/replaces defective parts.					10
Plans projects and assigns project personnel. Acts as project leader or assigns leader responsibilities. Installs or moves machinery and equipment using hoists, dollies, rollers, and trucks. Participates on equipment modifications. Participates on equipment/vendor selection.					10
Completes post-maintenance hard copy forms to document work performed, downtime, completion dates, etc. following department procedures. Uses computer for input, retrieval, report generation, project planning, and correspondence. May complete repair request forms if determines additional work needed on equipment.					10
Maintains current knowledge of building codes and safety practices. Attends internal specialty training.					2
Provides leadership and direct supervision to mechanical/technical employees. Provides input to decisions regarding hiring, development, discipline and termination.					30
Orders parts/materials.					22
Non-Essential Duties and Responsibilities:					% Time
Participates in special projects as required.					1
Total Essential and Non-Essential:					100%

# ***NORTHROP GRUMMAN***

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## **INTERCONNECT TECHNOLOGIES JOB DESCRIPTION**

<b>Date:</b>	January 21, 2004	<b>FLSA:</b>	Hourly	<b>Grade:</b>	9
<b>Job Title:</b>	Maintenance Mechanic III	<b>Department:</b>	Manufacturing or Facilities		
<b>Reports To (title):</b>	Working Group Lead				
<b>Summary of Duties and Responsibilities:</b>					
Works independently to perform repairs and preventative maintenance on mechanical, electrical, electro-mechanical equipment; hydraulics; plumbing; pumps; controllers; conveyers; motors, etc. Repairs/ services according to layout plans, blueprints, drawings or work instructions. Responds to troubleshooting repair requests, particularly with complex problems, and completes paperwork (soft or hard copy) following department procedures. Assists and trains less experienced mechanics.					
<b>Essential Duties and Responsibilities:</b>					<b>% Time</b>
Reviews daily preventative maintenance requests by priority status and determines workload and tool needs. Plans daily work schedule including meeting with production operators to balance priorities to be done with equipment not in use.					2
Performs preventative maintenance on a wide variety of industrial machinery and equipment using hand tools, automated tools, probes, meters, torches, etc.					25
Responds to down-equipment requests (calls or written). Assesses or diagnoses problems, dismantles machinery or facility equipment, and repairs/replaces defective parts.					30
Completes facility service requests and participates in maintenance projects such as installing or moving machinery and equipment using hoists, dollies, rollers, and trucks. Includes participating on equipment modifications.					29
Completes post-maintenance hard copy forms to document work performed, downtime, completion dates, etc. following department procedures. Uses computer for input, retrieval and basic reports and correspondence. May complete repair request forms if determines additional work needed on equipment.					5
Maintains current knowledge of building codes and safety practices. Attends internal specialty training.					2
Provides knowledge transfer and assists and trains less experienced mechanics. Plans projects and acts as project leader for assigned projects.					5
May order parts/materials.					
<b>Non-Essential Duties and Responsibilities:</b>					<b>% Time</b>
Participates in special projects as required.					2
Total Essential and Non-Essential:					100%



# NORTHROP GRUMMAN

DEFINING THE FUTURE

## INTERCONNECT TECHNOLOGIES JOB DESCRIPTION

Date:	October 7, 2004	FLSA:	Non-Exempt	Grade:	H09
Job Title:	Lead Environmental Technician	Department:	Quality Control - Labs		
Reports To (title):	Lab & Chem Maintenance Manager				
Summary of Duties and Responsibilities:					
Acts independently to chemically treat manufacturing waste water for disposal. Monitors acid, organic and [black] waste lines treatment, adjusts treatment chemical flows, and processes sludge removal. Performs repairs and maintenance on equipment. Performs field remediation well maintenance and leads department personnel.					
Essential Duties and Responsibilities:					% Time
Removes samples of treated waste water and performs lab tests for concentrations of metals (lead, copper, nickel) or acids. Analyzes solutions using atomic absorption tester. Calibrates spectrophotometer with purchased lab samples to establish the high and low parameters and then tests effluent samples. Logs Ph, percent of solids (ppm metals) and notes any changes made to system.					15
Monitors computerized water treatment in tanks. Using data from computerized probes and lab tests, manually adjusts pump flows of chemicals to treatment tanks. Manually adds certain concentrates to water baths to maintain proper levels. Changes out/replenishes treatment chemical containers when empty.					10
Pumps solids removed from waste water to holding tanks. Filters and presses to separate sludge from water. Sends water for re-treatment of waste water and extrudes sludge to holding bins for recycling.					9
Troubleshoots problems. Performs repairs and preventative maintenance on equipment, including calibration and repair on atomic absorption equipment. Maintains cleanliness of maintenance area.					5
Responsible for maintaining parking lot and sidewalks for snow and ice removal. Mows field.					6
Responsible for maintaining remediation well pumps. Monitors well depth, troubleshoots problems and repairs/replaces pumps. Reports operations to environmental engineer.					25
Maintains knowledge of current work instructions, chemical hazards and prevention. Attends internal specialty training.					3
Acts as working group lead which includes assigning tasks/projects, scheduling personnel, and orders supplies. Assists/trains less experience personnel.					12
Non-Essential Duties and Responsibilities:					% Time
Participates in special projects as required.					15
Total Essential and Non-Essential:					100%

# ***NORTHROP GRUMMAN***

**DEFINING THE FUTURE**

## **INTERCONNECT TECHNOLOGIES JOB DESCRIPTION**

Date:	October 7, 2004	FLSA:	Non-Exempt	Grade:	H09
Job Title:	Senior Environmental Technician	Department:	Quality Control - Labs		
Reports To (title):	Working Group Lead or Lab & Chem Maintenance Manager				
Summary of Duties and Responsibilities:					
Acts independently to chemically treat manufacturing waste water for disposal. Monitors acid, organic and [black] waste lines treatment, adjusts treatment chemical flows, and processes sludge removal. Performs repairs and maintenance on equipment. Assists/trains less experience personnel.					
Essential Duties and Responsibilities:					% Time
Removes samples of treated waste water and performs lab tests for concentrations of metals (lead, copper, nickel) or acids. Analyzes solutions using atomic absorption tester. Calibrates spectrophotometer with purchased lab samples to establish the high and low parameters and then tests effluent samples. Logs Ph, percent of solids (ppm metals) and notes any changes made to system.					18
Monitors computerized water treatment in tanks. Using data from computerized probes and lab tests, manually adjusts pump flows of chemicals to treatment tanks. Manually adds certain concentrates to water baths to maintain proper levels. Changes out/replenishes treatment chemical containers when empty.					25
Pumps solids removed from waste water to holding tanks. Filters and presses to separate sludge from water. Sends water for re-treatment of waste water and extrudes sludge to holding bins for recycling.					18
Troubleshoots problems. Performs repairs and preventative maintenance on equipment. Maintains cleanliness of maintenance area.					12
Responsible for maintaining parking lot and sidewalks for snow and ice removal. Mows field.					3
Maintains knowledge of current work instructions, chemical hazards and prevention. Attends internal specialty training.					12
Assists/trains less experience personnel.					2
Non-Essential Duties and Responsibilities:					% Time
Participates in special projects as required.					10
Total Essential and Non-Essential:					100%



# ***NORTHROP GRUMMAN***

**DEFINING THE FUTURE**

## **INTERCONNECT TECHNOLOGIES JOB DESCRIPTION**

<b>Date:</b>	October 7, 2004	<b>FLSA:</b>	Non-Exempt	<b>Grade:</b>	H07
<b>Job Title:</b>	Environmental Technician	<b>Department:</b>	Quality Control - Labs		
<b>Reports To (title):</b>	Working Group Lead or Lab & Chemical Maintenance Manager				
<b>Summary of Duties and Responsibilities:</b>					
Acts independently to chemically treat manufacturing waste water for disposal. Monitors acid, organic and [black] waste lines treatment, adjusts treatment chemical flows, and processes sludge removal. Performs basic repairs and maintenance on equipment. Seeks assistance for complicated repairs or troubleshooting.					
<b>Essential Duties and Responsibilities:</b>					<b>% Time</b>
Removes samples of treated waste water and performs lab tests for concentrations of metals (lead, copper, nickel) or acids. Analyzes solutions using atomic absorption tester. Calibrates spectrophotometer with purchased lab samples to establish the high and low parameters and then tests effluent samples. Logs Ph, percent of solids (ppm metals) and notes any changes made to system.					19
Monitors computerized water treatment in tanks. Using data from computerized probes and lab tests, manually adjusts pump flows of chemicals to treatment tanks. Manually adds certain concentrates to water baths to maintain proper levels. Changes out/replenishes treatment chemical containers when empty.					25
Pumps solids removed from waste water to holding tanks. Filters and presses to separate sludge from water. Sends water for re-treatment of waste water and extrudes sludge to holding bins for recycling.					25
Troubleshoots problems or seek assistance for complicated problems. Performs basic repairs and preventative maintenance on equipment. Maintains cleanliness of maintenance area.					15
Responsible for maintaining parking lot and sidewalks for snow and ice removal. Mows field.					1
Maintains knowledge of current work instructions, chemical hazards and prevention. Attends internal specialty training.					10
<b>Non-Essential Duties and Responsibilities:</b>					<b>% Time</b>
Participates in special projects as required.					5
Total Essential and Non-Essential:					100%

# ***NORTHROP GRUMMAN***

**DEFINING THE FUTURE**

## **INTERCONNECT TECHNOLOGIES JOB DESCRIPTION**

<b>Date:</b>	November 1, 2002	<b>FLSA:</b>	Exempt	<b>Grade:</b>	8
<b>Job Title:</b>	Environmental Engineer	<b>Department:</b>	Facilities		
<b>Reports To (title):</b>	Director of Facilities/Environmental				

### **Summary of Duties and Responsibilities:**

Manages the environmental concerns for facility in Missouri. Acts as the focal point for all regulatory compliance, reporting and crisis management. Regulatory entities include, but are not limited to: EPA, DNR, DOT, DOJ, LEPC, OSHA and various City and County agencies.

<b>Essential Duties and Responsibilities:</b>	<b>% Time</b>
Performs regulatory and in-house reporting, including but not limited to: EPA - Form R, Tier II, Biannual Hazardous Waste Report, Waste Minimization Report. MDNR - Monthly Well Log Report, Quarterly Hazardous Waste Report, Quarterly Air Emissions Report, Quarterly Stormwater Report. City of Springfield - Monthly IRTM & Cooling Tower Report, Monthly Wastewater Contribution Report, EIQ Emissions Inventory Questionnaire. Internal - Monthly Waste Shipment Report.	52%
Provides environmental engineering support (technical advisement, engineering calculations, process adjustment, etc.) to Interconnect Technologies wastewater operations and remediation efforts.	5%
Advises on environment concerns at field facilities. Works with supervisory and non-supervisory personnel to solve problems and make corrections and changes to meet requirements and improve quality.	5%
Advises for compliance with federal, state, and local environmental regulations and handles all contact with appropriate agencies for all domestic locations. Secures required permits.	10%
Acts as internal environmental engineering resource to other functional areas and outside contractors or agencies. Provides environmental engineering support and services.	2%
Provides required environmental training for plant personnel and outside contractors.	5%
Responsible for development and implementation of policies and procedures relating to environmental. Makes recommendations for changes.	5%
Keeps abreast of changes in environmental regulations and competitive practices. Makes recommendations for improvements.	2%
Provides input into annual budget, including any capital purchases.	2%
Reviews and approves all plant chemistry for environmental compliance, waste treatment and toxicological safety.	2%
Provides all DOT Hazardous Waste training, transportation paperwork, shipping container selection and labeling.	2%
Performs plant wide environmental compliance inspections.	2%



# ***NORTHROP GRUMMAN***

**DEFINING THE FUTURE**

<b>Essential Duties and Responsibilities:</b>	<b>% Time</b>
Assists with chemical handling safety training.	2%
Approves the use of waste disposal methods and facilities.	2%
Serves as a Safety Committee Member.	1%
Serves as Primary Emergency Response Coordinator.	1%

<b>Non-Essential Duties and Responsibilities:</b>	<b>% Time</b>
Participates in special projects as required.	2%
Total Essential and Non-Essential:	100%

This job description is not necessarily an exhaustive list of all responsibilities, skills, duties, requirements, efforts, or working conditions associated with the job. While it is intended to be an accurate reflection of the current job, management reserves the right to revise the job or require that other or different duties/tasks be performed.

# ***NORTHROP GRUMMAN***

**DEFINING THE FUTURE**

## **INTERCONNECT TECHNOLOGIES JOB DESCRIPTION**

Date:	September 14, 2005	FLSA:	Exempt	Grade:	5
Job Title:	Engineer I	Department:	PCB Engineering		
Reports To (Title):	Manufacturing Engineering				

### **Summary of Duties and Responsibilities:**

Works closely with senior engineers to design/develop, layout and improve manufacturing products or processes for the production of printed circuit boards. Monitors assigned operations and develops solutions to routine technical problems applying mechanical and/or chemical engineering principles, theory and concepts. Documents results.

<b>Essential Duties and Responsibilities:</b>	<b>% Time</b>
Evaluates documented customer requirements with current manufacturing capabilities and potential printed circuit board capabilities through new development. Provides input and suggestions.	10
Participates in the design and planning of layouts for processes such as etching, laminating, photo printing, and plating. Conducts tests and measurements throughout stages of production to assess and maintain control over process variables (i.e., temperature, density, pressure, tolerance, human error, etc.). Experiments with various processes and materials to improve manufacturing and lower production costs. May participate in cross-functional design teams.	45
Documents designs, procedures and work instructions under the direction of experience engineers. Provides input and suggestions for changes in work plans to meet customer and quality expectations and improve efficiencies.	10
Reviews performance outcomes, investigates problems, and revises documented procedures and instructions as needed. Reviews design process with appropriate manufacturing departments.	5
Compares manufacturing practices with external benchmarks and industry best practices. Maintains current knowledge on industry standards. May suggest improvements, including new technology.	5
Participates in meetings with manufacturing, engineering and maintenance personnel to support production goals.	5

<b>Non-Essential Duties and Responsibilities:</b>	<b>% Time</b>
Participates on special projects as assigned.	20
<b>Total Essential and Non-Essential:</b>	<b>100%</b>



# ***NORTHROP GRUMMAN***

## **DEFINING THE FUTURE**

### **INTERCONNECT TECHNOLOGIES JOB DESCRIPTION**

<b>Date:</b>	October 1, 2004	<b>FLSA:</b>	Non-Exempt	<b>Grade:</b>	H9
<b>Job Title:</b>	Senior Safety Technician	<b>Department:</b>	Facilities, PCB Operations		
<b>Reports To (title):</b>	Director- Engineering & Facilities				

#### **Summary of Duties and Responsibilities:**

Acts independently to outline and implement training programs on safety procedures and accident protection and prevention. Inspects facilities and maintains safety data. Recommends corrections and precautions to ensure regulatory compliance. Participates on safety and emergency teams/committees.

#### **Essential Duties and Responsibilities:**

#### **% Time**

Facilitates safety training programs or coordinates outside vendors to conduct training. Develops handouts and tracks employee attendance.

18

Participates in accident investigations and serves on the safety committee. Interviews victims and witnesses as necessary. Documents results and relays to safety committee along with possible corrections and/or precautions.

7

Performs air sampling and sound level assessments. Inspects, collects and maintains various safety data such as injuries, illness reports, air sampling results, safety training, etc.

10

Reviews and recommends personal protective equipment, material handling equipment, and changes in safety-related procedures to ensure regulatory compliance. Makes or orders safety-related signs.

14

Participates on emergency response team including planning and preparations for emergencies. Administers first aid.

6

Researches, writes and updates health and safety programs such as: Respiratory Protection Program, Exposure Control Program, Hazard Communication Program, Chemical Hygiene Plan, Hazardous Waste Operations and Emergency Response, Asbestos Control Program, TSCA Program, Confined Space Entry, Emergency Evacuation Plan, Lock-out Tag-out Program, and Powered Industrial Trucks Program. Includes keeping abreast of regulatory changes.

21

May represent the company to external health and safety auditors and insurance inspectors. Communicates with corporate safety personnel and OSHA.

8

Participates in special projects as needed such as designing solutions to ergonomic or safety-related problems, or implementing Safety Committee solutions.

16

#### **Non-Essential Duties and Responsibilities:**

#### **% Time**

Inventories first aid supplies.

2

Other projects as assigned.

34

Total Essential and Non-Essential: 100%

# ***NORTHROP GRUMMAN***

**DEFINING THE FUTURE**

## **INTERCONNECT TECHNOLOGIES JOB DESCRIPTION**

Date:	October 21, 2004	FLSA:	Non-Exempt	Grade:	AN6
Job Title:	Chem Lab Technician	Department:	Quality Control – Labs		
Reports To (title):	Lab & Chemical Maintenance Manager				

### **Summary of Duties and Responsibilities:**

Under general supervision, works in a laboratory setting to test chemical/metal bath solutions to determine if mixtures are within acceptable manufacturing standards. Learns to perform a variety of tests and use a variety of testing tools and equipment. Notifies appropriate personnel of non-conforming solutions so mixtures can be fixed.

<b>Essential Duties and Responsibilities:</b>	<b>% Time</b>
Receives samples of solution/baths used in manufacturing from operators for testing. May pull own samples. Reviews current work instructions for recent changes to ensure maintaining current knowledge.	10
Performs chemical tests to determine the concentration of chemical baths/solutions following detailed instructions and taking readings.	25
Analyzes metals using atomic absorption spectrophotometer. Runs baseline tests with purchased standards to establish the high and low parameters and then tests diluted samples of metal baths. Repeats, changing dilution factor (if necessary) until mixture falls within quality standards.	5
Analyzes brighteners in acid copper baths by placing brass panel into hull cell, attaching terminals to add amps to panel, removing and drying panel, and visually measuring burn against a Hull cell ruler.	20
Prepares samples and measures absorbance via Spec 21 equipment.	5
Inputs test readings into computer programs for processing against standards. If tests results are within acceptable levels, completes "Go" tag/card giving authority for equipment to continue operating using bath/solution. If test results are not in compliance, notifies applicable group of discrepancy and issues non-conformance report.	15
Maintains cleanliness of lab area. Cleans and washes beakers, vials, etc.	15

<b>Non-Essential Duties and Responsibilities:</b>	<b>% Time</b>
Participates in special projects as required.	5
<b>Total Essential and Non-Essential:</b>	<b>100%</b>



# ***NORTHROP GRUMMAN***

## **DEFINING THE FUTURE**

### **INTERCONNECT TECHNOLOGIES JOB DESCRIPTION**

<b>Date:</b>	October 21, 2004	<b>FLSA:</b>	Non-Exempt	<b>Grade:</b>	AN8
<b>Job Title:</b>	Senior Chem Lab Technician	<b>Department:</b>	Quality Control – Labs		
<b>Reports To (title):</b>	Lab & Chemical Maintenance Manager				

#### **Summary of Duties and Responsibilities:**

Acts independently in a laboratory setting to test chemical/metal bath solutions to determine if mixtures are within acceptable manufacturing standards. Performs a variety of tests and uses a variety of testing tools and equipment. Includes testing of gold baths. Notifies appropriate personnel of non-conforming solutions so mixtures can be fixed.

#### **Essential Duties and Responsibilities:**

#### **% Time**

Receives samples of solution/baths used in manufacturing from operators for testing. May pull own samples. Reviews current work instructions for recent changes to ensure maintaining current knowledge.	10
Performs chemical tests to determine the concentration of chemical baths/solutions following detailed instructions and taking readings.	25
Analyzes metals using atomic absorption spectrophotometer. Runs baseline tests with purchased standards to establish the high and low parameters and then tests diluted samples of metal baths. Repeats, changing dilution factor (if necessary) until mixture falls within quality standards.	5
Analyzes brightness in acid copper baths by placing brass panel into hull cell, attaching terminals to add amps to panel, removing and drying panel, and visually measuring burn against a Hull cell ruler.	10
Prepares samples and measures absorbance via Spec 21 equipment.	5
Performs gold concentration tests. Weighs and processes solution to separate and filter the gold. Reweighs crucibles. Using testing data, takes amp readings from plant equipment, makes gold adds as needed. Completes log to track adds to solution. Prepares monthly gold usage report.	10
Performs impurity gold tests using plated deposits and solution methods.	5
Inputs test readings into computer programs for processing against standards. If tests results are within acceptable levels, completes "Go" tag/card giving authority for equipment to continue operating using bath/solution. If test results are not in compliance, notifies applicable group of discrepancy and issues non-conformance report.	10
Maintains cleanliness of lab area. Cleans and washes beakers, vials, etc.	5
May act as working group lead which includes assisting/training less experienced personnel, ordering supplies, updating work instructions, etc.	10

#### **Non-Essential Duties and Responsibilities:**

#### **% Time**

# ***NORTHROP GRUMMAN***

**DEFINING THE FUTURE**

Non-Essential Duties and Responsibilities:	% Time
Participates in special projects as required.	5
Total Essential and Non-Essential:	100%

## Interconnect Technologies

DEC 27 2005

Interconnect Technologies Division  
Litton Systems, Inc.  
4811 West Kearney Street  
Springfield, MO 65803-9579  
Phone: 417-829-5200

NO: 16877  
Date 12/20/2005

Report Date and Time: 12/20/2005 9:41:16 AM

### SHIP TO:

Company Name: USEPA REGION VII VIN#  
Address Line#1: Trevor Urban  
Address Line#2: 901 S. 5th Street  
Address Line#3:  
City: Kansas City State: KS - Kansas Zip: 66101  
Country: USA Attention: treveor urban

Authority To Ship: Co #: Dept #: RMA#: Debit Memo:  
jami gay 2 248 No

To Be Shipped Via: Ship Condition: Freight Charge: Reference Purchase Order  
Fed Exp Overnight PPD \$0.00

Item:	QTY:	Description
1	1	Response to USEPA Inspection on 12/6-7/05 documenting corrective actions
	0	
	0	
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	0	
	0	
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	0	
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Tracking No: Weight: UOM Date Shipped: Shipped By:  
1

Received By: Date Received: Inventory Reviewed By: